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BLAKELY SOKOLOFF TAYLOR & ZAFMAN 1279 OAKMEAD PARKWAY SUNNYVALE, CA 94085-4040			YENKE, BRIAN P	
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**MAILED**

**FEB 21 2008**

**Technology Center 2600**

**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

**LED**

Application Number: 10/714,182  
Filing Date: November 14, 2003  
Appellant(s): CHRISTIAN, JOHN P.

**FEB 21 2008**

**Technology Center 2600**

Gordon R. Lindeen III  
Reg. No. 33,192  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 28 November 2007 appealing from the Office action mailed 18 July 2007.

**(1) Real Party in Interest**

A statement identifying the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

A statement identifying there are no related appeals or interferences in the brief is correct.

**(3) Status of Claims**

A statement of the status of the claims contained in the brief is correct.

**(4) Status of Amendments**

All amendments have been entered.

**(5) Summary of the Invention/Claimed Subject Matter**

The summary of invention contained in the brief is correct.

**(6) Grounds of Rejection To Be Reviewed on Appeal**

The appellant's statement on the grounds of the rejection in the brief is correct.

**(7) Claims 1-27 (Appendix)**

The copy of the appealed claims contained in the Appendix in the Brief is correct.

**(8) Evidence Relied Upon**

The following is a listing of the prior art of record relied upon in the rejection of claims under appeal.

	Tajima et al.,	JP-6-169440	06-1994
	Burns et al.,	US 6,639,964	10-2003
OFFICIAL NOTICE	Okin	US 2003/0188067	10-2003
	Yamamoto, et al.,	US 6,115,036.	09-2000
	Choi	US 5,752,757	05-1998
	Cragun et al.,	US 5,481,296.	01-1996
	Adams, III	US 6,057,873	05-2000

**(9) Grounds of Rejection**

It should be noted that the examiner previously erroneously included (Milne et al., US 2002/0180890) in the heading of the rejection--this reference was removed (from the body of the rejection, though not the heading) after appellant's previous amendment to incorporate Burns. The examiner has modified the 103 heading to reflect such.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 7, 9-10, 12-13, 15-16, 20-25 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tajima et al., JP-6-169440 in view of Burns et al., US 6,630,964.

In considering claims 1, 15 and 24,

Tajima discloses a modular TV receiver which includes detachable modules/cards, which may be replaced including (Fig 1) a communication satellite tuner, a broadcasting satellite tuner, a MUSE-NTSC converter a teletext adaptor etc...

However, Tajima does not explicitly recite the conventional components which transmit/receive/process the data within the modular receiver, i.e. buses.

The examiner evidences such conventional practice as shown by Burns et al., US 6,630,964 (Fig 1), which discloses both a data bus 116 and address bus 117 to receive multiple types of modulated signals and provide them to their respective decoder/tuner for demodulation/decoding (meeting the claimed 1<sup>st</sup> and 2<sup>nd</sup> bus connectors since the buses receive/transmit/send all data within the components).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to utilize a connection between the components/cards/modules of Tajima by using conventional

hardware/software such as the use of a bus to connect/interact the modules in order to receive/process and ultimately display the user desired data.

In considering claim 2,

As stated above with respect to claim 1, Tajima discloses the reception of communication satellite or broadcast satellite signals, wherein the signal are in the RF spectrum, thereby being received by RF bus.

In considering claims 3, 12, 13, 16 and 25,

Tajima discloses the tuning of signals from a communication or broadcast satellite which must be demodulated (i.e. converted to baseband) for display.

In considering claim 7,

The combination of Tajima/Burns does not disclose an encoder coupled between the tuner and to decode, however Burns discloses a single component for a particular transmission scheme to tune/demodulate and decode such signals, thus as evidenced by case law *In re Dulberg*, 289 F.2d 522, 523, 129 USPQ 348, 349 (CCPA 1961), the separation of parts is considering an obvious modification to one of ordinary skill in the art, thus meeting the claim as recited.

Although the appellant traverses the examiner pertaining to claim 7, the examiner notes, no OFFICIAL NOTICE was taken, the examiner made an obvious rejection. Also, noted is the appellant has equated a encoder to perform the operation of a decoder, wherein typically a decoder performs a decoding operation.

In considering claims 9, 22, 23

Refer to claims 1 and 6 above.

In considering claim 10,

Tajima discloses the feature of replaceable, exchanging, upgrading modules/cards/slots within the system, wherein they would have a surface to be gripped and thus inserted and/or removed.

In considering claims 20 and 27,

Tajima/Burns discloses the reception of various signals and the splitting/parsing of such signals via multiple contacts/slots within the system. Although, the word splitter is not explicitly recited, the examiner takes 'OFFICIAL NOTICE' regarding such, wherein the term "Splitter" in the field of endeavor is common practice.

Although not traversed, the examiner evidences the concept of a splitter which separates an incoming signal into respective components via Cragun et al., US 5,481,296.

In considering claim 21,

The combination of Tajima/Burns disclose the reception of signals, , however they do not disclose the conventional antenna/cabling of such system (i.e. coax), wherein the use of such cabling with an antenna in the reception/processing of audio/video signals is well known thus the examiner takes "OFFICIAL NOTICE" regarding as such, since it's a type of wire/cabling used to process such signals.

Although not traversed, the examiner evidences the use of a coaxial cable connector to receive video signals from an antenna by relying upon, Adams, III US 6,057,873) which discloses CATV referring to community antenna television coaxial cables (col 3, line 8-15).

Claims 4, 11, 17, 19 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tajima et al., JP-6-169440 in view of Burns et al., US 6,630,964 and Okin, US 2003/0188067.

In considering claims 4, 11, 17,19 and 26,

The combination of Tajima/Burns discloses the transfer of data/command/control within the system/modules by the use of buses. It is also known that other conventional command/control systems are known such as USB, as disclosed by appellant.

Based upon appellant's traversal of claim 4 the examiner incorporates, Okin US 2003/0188067, which discloses the (para 51) concept that a system may poll connector slots/pins in order to determine the number and nature of the boards that are present and to determine whether any patches or updates are required.

The combination of Tajima and Burns discloses a removable functional cards/tuners which allow the user to remove/replace/upgrade as desired, wherein the modules utilize conventional buses to control/process and address the desired module(s) as required. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the Tajima/Burns combination by allowing the system the conventional capability of determining which boards are present/connected in order to provide the user the ability to remove/replace/upgrade if desired.

Claims 5, 14 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tajima et al., JP-6-169440 in view of Burns et al., US 6,630,964 and Yamamoto, et al., US 6,115,036.

In considering claims 5 and 14, 18

Burns discloses the concept of a printed circuit board. Tajima discloses the concept of interchangeable modules. Wherein it is also common practice to provide a shorted high or low field for a respective slot, in order for the system to ascertain the identity/status of such slot, thus the examiner takes "OFFICIAL NOTICE" regarding such.

Based upon appellant's traversal of claim 18, the examiner will evidence such notice, by incorporating Yamamoto et al., US 6,115,036 which discloses a cartridge which includes connectors (ground, address, data, reset and power, Fig 24b) which allow the cartridge to connect to the system (control/address) bus and thus be utilized (meeting the printed circuit board substrate including electrical connectors, shorted high or low).

The combination of Tajima and Burns discloses a removable functional cards/tuners which allow the user to remove/replace/upgrade as desired, wherein the modules utilize conventional buses to control/process and address the desired module(s) as required. Therefore it would have been obvious to

one of ordinary skill in the art at the time of the invention to modify the Tajima/Burns combination by allowing the system the conventional capability of controlling/utilizing such cards/modules which require some form of communication/control as shown by Yamamoto.

Claims 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tajima et al., JP-6-169440 in view of Burns et al., US 6,630,964 and Appellant's Admitted Prior Art (AAPA).

In considering claim 6,

Neither Tajima/Burns disclose the conventional fingers at the end of a cartridge, however the use of such based upon the type of card/module used is notoriously well known in the art, and since appellants own specification recites the common knowledge/use of such is not patentable.

Based upon appellant's traversal of claim 6, the examiner will evidence such notice, by relying on appellant's own disclosure. Specifically, appellant's own disclosure (para 0014) discloses that fingers/connection are similar to how interchangeable video game cartridges, computer adapter cards, PC add-in cards, and many other types of interchangeable components connect. The disclosure also states, "The particular type of connection is not essential to the present invention however. Any type of connection, electrical, RF, inductive or otherwise may be used with any of the variety of different physical and mechanical designs."

The combination of Tajima and Burns discloses a removable functional cards/tuners which allow the user to remove/replace/upgrade as desired, wherein the modules utilize conventional buses to control/process and address the desired module(s) as required. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the Tajima/Burns combination by allowing the system the conventional capability of allowing the cards/modules to be connected and thus utilized as disclosed by AAPA.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tajima et al., JP-6-169440 in view of Burns et al., US 6,630,964 and Choi, US 5,752,757.

In considering claim 8,

Tajima discloses the concept of a unit/housing in their modular design.

Although the appellant traverses an "OFFICIAL NOTICE" that was not taken, the examiner will nonetheless that a card/module typically includes a housing is evidenced by Choi, US 5,752,757 (Fig 1, cartridge 16) wherein the cartridges inner components are covered in a housing structure as shown.

It should also be noted that the examiner made an obvious rejection, since the module in Tajima, included an housing afforded by the system. The appellants arguments appear to be that since Tajima's module does not include a housing when removed, it does not have a housing. The examiner given the broadest reasonable interpretation of the claims, provided evidence of a cartridge/module which included a housing (i.e. when connected via Tajima). Although not required, based upon the current claim language, the examiner nonetheless evidenced the concept of a removable card/module which was housed.

## ***(10) Response to Arguments***

### ***Appellant's Arguments***

- a) Appellant states that the new Burns references makes no suggestion that it may be adapted for use with a modular tuner cartridge.
- b) Appellant states that the references do not disclose "a baseband bus to connect to a tuner cartridge in the slot and to provide command and control to the tuner cartridge in the slot".
- c) Appellant states that the examiner has failed to provide a reference with a removable cartridge.

The appellant states, that the removable modules have a cover plate but not housing, no fingers, no gripping surface etc...

- d) Appellant states that Tajima does not show a housing. Appellant states that even if the cover plate were considered to be the housing, it does not enclose the tuner.
- e) Appellant states that claim 9, which recites the features of the cartridge, i.e. the housing, protruding edge and bus connection fingers distinguish itself from the references.
- f) Appellant states that claim 10, which recites a gripping surface to allow the cartridge to be inserted into and removed from a tuner system is not shown by the references.
- g) The appellant traversed the examiner pertaining to claims 4, 6, 7 and 8.

***Examiner's Response***

- a) The examiner agrees. However, as stated in the rejection, Burns was incorporated to evidence the use of a address and data bus in a tuning system which could receive a variety of inputs. It should be noted that if Burns disclosed the concept of modular tuner cartridges, the Burns reference would have anticipated the invention. In response to appellant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986)..
- b) The examiner disagrees. As stated in the rejection the combination of Tajima/Burns discloses a removeable module/tuner system which receives/processes a modulated signal which is then demodulated (i.e. basedband) for display.
- c) The examiner disagrees. The appellant also identifies that Tajima includes removeable modules, where Tajima discloses the modules may be easily attached or detached, where Tajima states that the user may want to add new functions to their TV and thus add/replace such modules. Thus the examiner disagrees that removeable modules do not meet the limitation of a removable cartridge. Regarding the no housing, no fingers, no gripping surface, the examiner has addressed the traversal of claims 4-8 above.

d) The examiner disagrees. It should also be noted that the examiner made an obvious rejection, since the module in Tajima, included an housing afforded by the system. The appellants arguments appear to be that since Tajima's module does not include a housing when removed, it does not have a housing. The examiner given the broadest reasonable interpretation of the claims, provided evidence of a cartridge/module which included a housing (i.e. when connected via Tajima). Although not required, based upon the current claim language, the examiner nonetheless evidenced the concept of a removable card/module which was housed. The examiner has evidenced a removed cartridge with a housing by relying upon Choi as stated above (claim 8).

- e) The examiner disagrees, as stated above in the rejection.
- f) The examiner disagrees. The examiner maintains that since a module may be easily replaced (removed/inserted) by the user, the user may easily grab, grip, hold, secure such module to do such.
- g) The examiner has addressed the traversed claims, see the rejection of these claims above.

#### ***(11) Related Proceeding Appendix***

The appellant's statement that there are no related proceedings and thus not corresponding appendix is correct.

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For the above reasons, it is believed that the rejections be sustained.

Respectfully submitted,



BRIAN P. YENKE  
PRIMARY EXAMINER

11 February 2008

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